MISCELLANEOUS MALAYSIAN NOTES

E. D. MERRILL

With one plate

MORACEAE

Ficus porteana Regel, Gartenfl. 11: 280. t. 372. 1862; Gagnep. in Lecomte, Fl. Gén. Indo-Chine 5: 774. 1928.

Ficus malunuensis Warb. in Perk. Fragm. Fl. Philipp. 196, 1905; Elm. Leafl. Philipp. Bot. 1: 192, 1906; Merr. Enum. Philipp. Fl. Pl. 2: 56, 1923. Ficus cordatifolia Elm. Leafl. Philipp. Bot. 4: 1250, 1911.

My attention was called to *Ficus porteana* Regel by Gagnepain's reference of certain Indo-Chinese material to it and by his reduction of *Ficus malunuensis* Warb. to it as a synonym. Regel's species, entirely overlooked by me when engaged in the preparation of the Philippine enumeration, was based on specimens cultivated in Moscow, grown from seeds secured by Mr. Porte in the Philippines (Luzon) in 1861. Regel's description is based on sterile material and from his figure, a somewhat juvenile form, for the large leaves are shown as having a fairly large lateral lobe on each side, a character that is lost in mature specimens. There is not the slightest doubt as to the identity of Warburg's species, also based on Luzon material, with the form characterized forty-three years earlier by Regel. There is some doubt in my mind as to whether or not the Indo-Chinese specimens referred here by Gagnepain actually represent the same species as the Philippine form. Its general alliance seems to be with *Fictus callosa* Willd.

Ficus Pyrifolia Burm. f. Fl. Ind. 226. 1768 = Pyrus pyrifolia (Burm. f.) Nakai, Bot. Mag. Tokyo 40: 564. 1926; Rehd. Man. Cult Trees Shrubs ed. 2, 404. 1940.

This reduction was made on the basis of an examination of Burman's specimens in the Delessert herbarium at Geneva; there are three sheets, all sterile, from the vicinity of Nagasaki, collected by Kleinhof; these, according to Nakai, represent the ordinary Japanese sand pear, which by various authors has been placed under *P. sinensis* auctt., *P. serotina* Rehd., and *P. montana* Nakai. Nakai attempted to define a number of minor forms of this cultigen, but no botanist has, as yet, clarified its relationships with the Chinese forms of the sand pear. In my treatment of Burman's species, Philipp. Jour. Sci. 19: 346. 1921, working solely from Burman's descriptions, I suggested that *Ficus pyrifolia* Burm. f. might prove to be the same as *Ficus erecta* Thunb., the type of which was from Japan, but this is an error. In recent years the Burman name has been attached to some Chinese collections of *Ficus erecta* Thunb.

URTICACEAE

Laportea peltata Gaudich. Freyc. Voy. Bot. 498. 1830, nomen nudum, et ex Decaisne, Herb. Timor. Descr. 162. 1835, descr.; Wedd. Arch. Mus. Hist. Nat. 9: 126. 1856 (Monog. Urt. 126), et in DC. Prodr. 16(1): 80. 1869, cum syn.; J. J. Sm. ex Koord. & Val. Meded. Dep. Landb. 10: 678. 1910 (Bijdr. Boomsoort. Java 12: 678); Koord. & Val. Atlas Baumart. Java 4: fig. 796. 1918.

Urtica peltata Blume, Bidjr. 496. 1825.

MINDANAO: Cotabato, Nutol, Bur. Sci. 84935, 84941, Ramos & Edano, March, 1932, a tree 8 m. high in rather dry forests at low altitudes. Java, Timor, and probably in other parts of the Malay Archipelago; new to the Philippines.

Both of the above cited specimens agree very closely with authentically named Javan specimens collected by Koorders, one having been distributed as representing the very different Laportea crassifolia C. B. Rob., and the other as L. mindanaensis Warb. It seems to be apparent that Gaudichaud did not know of the published description of Urtica peltata Blume, Bijdr. 496. 1825, for his original publication of the accepted binomial was simply a nomen nudum and a new name for Urtica atrox Leschen., also a nomen nudum. Therefore the authority should not be cited as "(Blume) Gaudichaud," but merely as Gaudichaud. The first description of the species under Laportea was that prepared by Decaisne, and he also cited only Urtica atrox Lesch. as a synonym. Weddell in 1856 first, and apparently correctly, associated Blume's earlier name with that so casually published by Gaudichaud and later validated by Decaisne.

Laportea elliptica sp. nov.

Laportea peltata sensu Merr. Univ. Calif. Publ. Bot. 15: 50. 1929, non Gaudich.

Species L. peltatae Gaudich. affinis, differt foliis majoribus, ellipticis, haud molliter pubescentibus sed subscaberulis et secus costam nervosque pilos urentis numerosos ferentibus, nervis primariis utrinque circiter 15. Arbor, trunco 30-45 cm. diametro, ramulis ultimis plus minusve incrassatis, siccis circiter 8 mm. diametro, pubescentibus, cicatricibus ad 8 mm. diametro notatis, partibus junioribus dense subadpresse hirsutis; foliis longe (8-13 cm.) petiolatis, perspicue peltatis, basi late rotundatis, ellipticis vel subobovato-ellipticis, chartaceis, 15-30 cm. longis, 11-15 cm. latis, apice breviter acuminatis, margine breviter dentatis vel denticulatis, dentibus inter se 1.5-3 mm. distantibus, siccis olivaceis, supra minute albido-verruculosis, secus costam pubescentibus et pilos urentis ferentibus, subtus scabridulis, paullo pallidioribus et nervis reticulisque exceptis glabris vel subglabris; nervis primariis utrinque circiter 15, perspicuis, subtus elevatis, curvato-patulis, secus marginem arcuato-anastomosantibus, reticulis distinctis, elevatis et cum costa nervisque plus minusve pubescentibus et pilos brevis numerosos urentis ferentibus; inflorescentiis longis, laxis, paniculatis, usque ad 45 cm. longis, plus minusve pubescentibus et pilis

numerosis urentibus instructis, ramis primariis 4–8 cm. longis; floribus $\mathfrak P$ sessilibus, in ramulis ultimis brevibus flabellatim dispositis, sessilibus, capitulis 5–9-floris, calycis segmentis acuminatis, vix 0.5 mm. longis; acheniis compressis, glabris, subovatis, 2 mm. longis, acuminatis, stylis persistentibus gracilibus, ad 3 mm. longis, leviter patule hirsutis; floribus $\mathfrak F$ numerosis, calycis segmentis subellipticis, 1.5–2 mm. longis, filamentis 3 mm. longis.

BRITISH NORTH BORNEO: Tawao, Elmer 21472 (2), 11433 (3), October 1922 to March 1923.

When the Elmer collections were being studied at the University of California, these specimens were referred, on the basis of published descriptions only, to Laportea peltata Gaudich, and were reported as such; but it was then noted that they differed from Gaudichaud's species in certain striking characters. Now that it is possible to make direct comparisons with authentically named Javan specimens of the Koorders collections, it becomes evident that there is really little in common between this Bornean form and Laportea peltata Gaudich., except in the conspicuously peltate leaves of both. The indumentum of the two species, as well as the leaf shape and size, and the more numerous lateral nerves in the present species are very different. In Gaudichaud's species the lower surface of the leaves is very densely and softly cinereous-pubescent, the indumentum entirely covering the parenchyma; in Laportea elliptica the midrib, and to a limited degree the nerves, are pubescent, but these and the reticulations bear many short, stiff, stinging hairs; yet the parenchyma within the ultimate reticulations is glabrous. In the herbarium of the Arnold Arboretum the pistillate type was found under no. 21172, Madhuca elmeri Merr., apparently some error having been made by Mr. Elmer in completing the labels, which makes me suspect that the same situation may exist elsewhere. The correct number is 21472, for 21172 is the Madhuca and 21472 the Laportea.

LEGUMINOSAE

Crudia cauliflora sp. nov.

Arbor parva, foliis 1-foliolatis et ramulis glabris, fructibus caulinis, breviter denseque pubescentibus; ramis ramulisque teretibus, ultimis 1 mm. diametro; foliolis subcoriaceis, oblongo-ellipticis, 15–18 cm. longis, 6–7 cm. latis, basi late rotundatis, apice distincte sed obtuse acuminatis, siccis subtus brunneis, supra subolivaceis, subopacis; nervis primariis utrinque circiter 7, subtus paullo elevatis, laxis, patulis vel subpatulis, inter se 1.5–2.5 cm. distantibus, 1–1.5 cm. a margine arcuato-anastomosantibus, reticulis primariis laxis, ultimis subconfertis; petiolo cum petiolulo circiter 1 cm. longo; racemis caulinis, solitariis, vetustioribus glabris vel partibus ultimis breviter obscure pubescentibus, saltem 10 cm. longis (floribus ignotis); fructibus solitariis, compressis, oblongo-ellipticis, leviter inaequilateralibus, 8 cm. longis, 4 cm. latis, extus pallide brunneis et dense breviterque pubescentibus, seminibus 2 vel 3.

PHILIPPINE ISLANDS: Siargao: Ramos & Pascasio, Bur. Sci. 34921, June 1919, the only known collection, TYPE in the herbarium of the Arnold Arboretum.

This was designated many years ago by me as new in the genus Sindora, but was never described, probably because I later realized that it could not represent any Sindora, and I had hoped that flowering specimens would eventually be received. It resembles several Malaysian species, such as Crudia bantamensis (Hassk.) Benth., C. beccarii Ridl., C. curtisii Prain, C. reticulata Merr., and even C. subsimplicifolia Merr. From all of these it is distinguished by its simple leaves being broadly rounded at the base; and from all described species of the genus it is distinguished by its solitary cauline racemes. None of De Wit's descriptions of the 18 Malayan species which he recognized in 1950 seems to apply to this species.*

Pithecellobium splendens (Miq.) Prain, Jour. As. Soc. Bengal 66(2): 516. 1897 (Novic. Ind. 350. 1905), Pithecolobium in nota.

Albizzia splendens Miq. Fl. Ind. Bat. Suppl. 280. 1861.

Pithecolobium confertum Benth. Trans. Lin. Soc. 30: 577. 1875; Bak. in Hook.
f. Fl. Brit. Ind. 2: 204. 1878; Prain in King, Jour. As. Soc. Bengal 66(2): 264. 1897 [Mater. Fl. Malay. Penin. 3 (no. 9): 264], op. cit. 508; Ridl. Fl. Malay Penin. 1: 661. 1922.

Malay Peninsula, Sumatra.

Prain's new binomial does not appear in Index Kewensis nor in any of its supplements to date, yet the publication of it is valid. From his own statement it is clear that he did not intend to replace Bentham's binomial by the one based on the earlier *Albizzia splendens* Miq., as he stated that it did not appear to him to be necessary or just, to rename Bentham's species because Miquel's description was based on leaf specimens only.

RUTACEAE

Glycosmis macrantha Merr. Univ. Calif. Publ. Bot. 15: 114. 1929 (April 10).

Glycosmis oliveri Stapf ex Ridl. Kew Bull. 1930: 80. 1930, syn. nov.

The types involved are *Beccari 2595* from Sarawak, for Stapf's species, and *Elmer 12134*, 21456, 21528 from British North Borneo, on which the earlier published *G. macrantha* Merr. was based. The only reason for publishing this note is the fact that Tanaka has added annotations to some of the Elmer numbers accepting Stapf's specific name. It is unfortunate that Stapf did not publish his new species at the time he studied *Beccari 2595*, for in publishing its first description, Ridley's work was antedated nearly a year by the publication of *G. macrantha* Merr. The two species are identical.

* DE WIT, H. C. D. The genus Crudia Schreb. (Leguminosae) in the Malay Archipelago south of the Philippines. Bull. Jard. Bot. Buitenz. III. 18: 407-434. fig. 1-3. 1950.

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MELIACEAE

Aglaia heterobotrys sp. nov. § Euaglaia.

Species A. shawianae Merr. affinis, differt foliis paullo minoribus, floribus breviter sed distincte pedicellatis, sepalis oblongis. Frutex vel arbor parva, foliis stricte 1-foliolatis, ramulis teretibus, pallidis, glabris, novellis circiter 2 mm. diametro, decidue breviter stellato-pubescentibus, indumento ferrugineo; foliis oblongo-ellipticis, chartaceis, 14-20 cm. longis, 4-7.5 cm. latis, basi late acutis vel subrotundatis, apice tenuiter acuminatis, acuminibus 1.5-2.5 cm. longis, obtusis, utrinque glabris, siccis pallide olivaceis, subnitidis; nervis primariis utrinque circiter 20, utrinque distinctis, elevatis, ad marginem arcuato-anastomosantibus; petiolo cum petiolulo 2-2.5 cm. longo, glabro; inflorescentiis in axillis superioribus, breviter stellato-pubescentibus, indumento ferrugineo, inferioribus simplicibus, ad 16 cm. longis, elongatis, floribus in partibus superioribus racemose dispositis, superioribus paniculatis, ad 14 cm. longis, pedunculatis, ramis primariis inferioribus 2.5 cm. longis, superioribus gradatim brevioribus, floribus racemose dispositis, pedicellis 0.5-1 mm. longis, bracteolis anguste lanceolatis, stellato-pubescentibus, ad 1 mm. longis; sepalis liberis vel subliberis, ad 1 mm. longis, oblongis vel anguste oblongis, obtusis vel subacutis, stellato-pubescentibus, 1 mm. longis; petalis 5, glabris, liberis, oblongo-obovatis vel late oblanceolatis, obtusis, 2 mm. longis, 0.6-1 mm. latis; tubo glabro, libero, 1.8 mm. longo, antheris 5, 0.4 mm. longis, inclusis, ovario dense pubescenti.

SUMATRA: East Coast, Kota Pinang District, Si Mandi Angin on the Soengei Kanan, topographic sheet 41, southeast corner, Rahmat Si Toroes 4197, April-May, 1933, with the local name kajoe piran.

The alliance of this species is clearly with that small group of simpleleaved species of which the Bornean Aglaia triandra Ridl., A. odoardoi Merr., A. matthewsii Merr., and A. shawiana Merr., as well as the Siamese A. meliosmoides Craib, are typical. It is distinguished by its vegetative and other characters, and particularly by its always racemosely arranged, shortly but distinctly pedicelled flowers. The inflorescences in the lower leaf axils are greatly elongated simple racemes, the flowers borne only along the upper 2 to 3 cm., but the uppermost inflorescence is a normal panicle.

Walsura monophylla Elm. Leafl. Philipp. Bot. 9: 3391. 1937, descr. angl.

Arbor 5.5 m. alta, inflorescentiis obscure pubescentibus exceptis glabra, foliis omnibus 1-foliolatis. Ramulis teretibus, glabris, lenticellatis, ultimis circiter 2 mm. diametro; foliolis oblongo-ellipticis, coriaceis, 11-28 cm. longis, 4-8 cm. latis, subtus pallidis, brevissime et acute acuminatis vel acutis, basi plerumque obtusis, nervis primariis utrinque 10-15, subpatulis, curvatis, arcuato-anastomosantibus, subtus distinctioribus; petiolo 1-2 cm.

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longo; inflorescentiis terminalibus, anguste paniculatis, circiter 7 cm. longis, obscure pubescentibus, ramis primariis 1–1.5 cm. longis, patulis; floribus inter majores, flavido-albidis, circiter 4 mm. longis, 5-meris; sepalis triangulari-ovatis, acutis, obscure pubescentibus; petalis oblongis, obtusis vel subacutis, glabris, 4 mm. longis, 2 mm. latis; filamentis pubescentibus, tubo deorsum utrinque glabro; fructibus junioribus 5–8 mm. longis, breviter ellipsoideis vel subovoideis, pubescentibus.

A second Philippine collection of this species is *Ebalo 556* from Mount Langogan, near Puerto Princesa, Palawan, Feb. 23, 1940; the type is *Elmer 12903* from Brooks Point, Palawan. The above Latin description has been prepared to validate Elmer's binomial. The striking character of the species is its strictly 1-foliolate leaves, all other known species of the genus having pinnate leaves. It has long been known that *Aglaia*, another genus of the family, does contain a fair number of species with strictly simple leaves, although in the vast majority of its species the leaves are pinnate, and in all the known species of *Vavaea* the leaves are strictly simple. This reduction of pinnate leaves to simple ones in certain species of *Aglaia* is now paralleled in *Walsura*.

EUPHORBIACEAE

Aporosa cardiosperma (Gaertn.) comb. nov.

Croton cardiospermum Gaertn. Fruct. 2: 120. pl. 107. fig. [11]. 1791.

Agyneia latifolia Moon, Cat. Pl. Ceyl. 65. 1824.

Aporosa latifolia (Moon) Thwaites, Enum. Pl. Ceyl. 288. 1864; Trimen, Hand-book Fl. Ceyl. 4: 39. 1898; Pax & Hoffm. Pflanzenr. 81 (IV. 147. XV): 96. 1922.

A species known only from Ceylon. The identity of Gaertner's species with that later described as A. latifolia (Moon) Thwaites was determined by Hallier f., Rec. Trav. Bot. Néerl. 15: 35. 1918. According to Thwaites the native name kebella, cited by Gaertner, belongs with the distinctly different Aporosa lindleyana Baill., but the characters as described by Gaertner and the details of his figure are those of the Thwaites, not of the Baillon species.

At the end of volume two of his *De fructibus et seminibus plantarum*, Gaertner assembled under a center heading *Barbarae* nine alphabetically arranged taxa which he described and figured under their native names (Ceylon and Java); Fruct. 2: 485–488. *pl. 180.* 1791. Hallier f., op. cit., gave some attention to the identity of these, although the descriptions were manifestly not intended to represent new genera, nor are any binomials used. They are merely casual names for those fruits that Gaertner had which he could not refer to any described genus. A very few of these names have appeared in taxonomic literature as if genera were intended, and in two cases binomials are involved, although the latter were not originated by Gaertner. Hence, the identification of these old Gaertner taxa in terms of the binomial system is of only slight academic interest, as they scarcely bear on problems of nomenclature. The entries are as follows:

"Balangue. E. madagasc."

This is the whole basis of Balangue gaertneri DC. Prodr. 8: 316. 1844. It is possibly some rhamnaceous plant.

"Cucumeroides. Ex Japonia." = Trichosanthes.

"Edokke zeylonens." = Chaetocarpus castanocarpus Thwaites.

"Giek zeylonens." = Odina wodier Roxb. = Lannea coromandelica (Houtt.) Merrill, Jour. Arnold Arb. 19:353.1938, cum syn.

"Zoon zelonens." = Schleichera oleosa (Lour.) Oken, Allgem. Naturgesch. 3(2): 1341. 1841; Merr. Interpret. Herb. Amb. 337. 1917, Jour. Arnold Arb. 31: 284. 1950. (Schleichera trijuga Willd.).

This in earlier years, was referred to the menispermaceous *Pachygone ovata* (Poir.) Miers, and appears as a synonym of that species in the latest monographic treatment of the family, Diels, Pflanzenr. 46(IV. 94): 343. 1910, where it does not belong. The binomial *K. zeylanicus* is currently credited to Gaertner, but he did not originate it. The earliest reference to it that I have located is in the synonymy of Miers' species, Hooker f. & Thomson in Hook. f., Fl. Ind. 1: 105. 1872.

"More zeylonens." = Euphorbia longana Lam.

"Pite-heddija javan." = ?

"Terme javan." = Acronychia?

"Wal-tiedde & Keipisan Zeylonens." = ?

Apparently some menispermaceous plant, perhaps Tiliacora, is represented.

ANACARDIACEAE

Parishia maingayi Hook. f. Fl. Brit. Ind. 2: 30. 1876; King, Jour. As. Soc. Bengal 65(2): 493. 1896 (Mater. Fl. Malay. Penin. 2: 779); Ridl. Fl. Malay Penin. 1: 535. 1922.

Parishia elmeri Merr. Univ. Calif. Publ. Bot. 15: 168. 1929, syn. nov.

I am now convinced that *Parishia elmeri* Merr. (1929), type from British North Borneo (Elmer 21662) belongs with Hooker's species and it is accordingly reduced to the latter. This gives its range as the Malay Peninsula, Sumatra, Riouw, and Borneo, a very natural one. The Sumatran and Riouw specimens that I have seen are sterile.

Parishia malabog Merr. Philipp. Jour. Sci. 7: Bot. 281. 1912, Enum. Philipp. Fl. Pl. 2: 472. 1928.

Spondias romblonensis Elm. Leafl. Philipp. Bot. 10: 3683. 1939, descr. angl., syn. nov.

The type of Elmer's species, now reduced, is a staminate specimen, his number 12164 from Romblon. See the note at the end of my original description of 1912. Luzon (Tayabas), Mindoro, Ticao, Masbate, Sibuyan, Tablas, Romblon, Cebu, and Sibutu Islands. Endemic.

CELASTRACEAE

Celastrus paniculatus Willd. Sp. Pl. 1: 1125. 1798.

Alsodeia glabra Burgersdyk in Miquel, Pl. Jungh. 122. 1852; Miq. Fl. Ind. Bat. 1(2): 116. 1858; Oudem. Arch. Néerl. 2: 199. pl. 9. 1867, syn. nov. Rinorea glabra O. Kuntze, Rev. Gen. Pl. 1: 42. 1891, syn. nov.

The type of Alsodeia glabra Burgersdyk, a fruiting specimen, was collected in Sumatra by Junghuhn. I had suspected from Oudeman's excellent illustration, because of the terminal panicle (in fruit) and other characters, that a Celastrus was represented and not a representative of the violaceous Alsodeia = Rinorea. Accordingly, while in Leiden I looked up the type and found that Hallier had already made the transfer to Celastrus in the herbarium but that he considered that a valid species of that genus was represented; I can find no record of his having published this conclusion. To me the Junghuhn specimen represents a form of the widely distributed Celastrus paniculatus Willd., type from India, the species, as currently interpreted, extending to Ceylon, Burma, Siam, Indo-China, southeastern China, the Philippines, Malay Peninsula (and now Sumatra), Java, and Timor. I have seen no specimens from Borneo, although it is to be expected there, as well as in Celebes and the Moluccas. Koorders, who in 1909 studied the type of Flüggea? serrata Miq. (1858) from Java, correctly reduced that species to Celastrus, and further to C. paniculatus Willd. Other synonyms currently placed here are: Celastrus alnifolius D. Don, C. dependens Wall., C. multiflorus Roxb., C. rothianus Roem. & Schult., C. metzianus Turcz., C. polybotrys Turcz., Ceanothus paniculatus Roth., Scutia paniculata G. Don, and Diosma serrata Blanco.

Kurrimia robusta (Roxb.) Kurz, Jour. As. Soc. Bengal. 39(2): 73. 1870; Pitard in Lecomte, Fl. Gén. Indo-Chine 1: 893. 1912.

Celastrus robustus Roxb. Fl. Ind. 2: 395. 1824.

Bhesa moja Ham. ex Arn. Edinb. New Philos. Jour. 16: 315. 1834.

Rhesa moja Walp. Repert. 1: 538. 1842.

Kurrimia pulcherrima Wall. List no. 4334. 1830, nom.; Laws. in Hook. f. Fl. Brit. Ind. 1: 622. 1875, descr.

Nothocnestis sumatrana Miq. Fl. Ind. Bat. Suppl. 531. 1862.

Sarcosperma tonkinense H. Lecomte, Bull. Mus. Hist. Nat. Paris 24: 534. 1918, Fl. Gén. Indo-Chine 3: 914. 1930, syn. nov.

In their critical treatment of the Sarcaspermataceae, Lam and Varossieau, Blumea 3: 198. 1939, who had seen Lecomte's type, a fruiting specimen, correctly eliminated Sarcosperma tonkinense H. Lecomte from the genus and family and concluded that it was probably not even a sapotaceous plant; no identification of it was suggested. While in Paris in August 1950, I examined the type and at once the problem resolved itself. Manifestly Lecomte's type, Bon 3974, represents a species of the celastraceous Kurrimia, not a Sarcosperma. Direct comparisons then made showed that it was a fruiting specimen of the rather common and widely

distributed Kurrimia robusta (Roxb.) Kurz, which extends from Khasia and Silhet to Burma, Siam, and Indo-China southward to Singapore and Sumatra. I think that Nothocnestis sumatrana Miq. Fl. Ind. Bat. Suppl. 531. 1862, is correctly placed as a synonym of Roxburgh's species, for although I have not seen its type I take Netherl. Ind. For. Serv. 31688, 32124 from Palembang, Sumatra, the type locality of Miquel's monotypic genus, to represent it, and I refer these two modern collections to Kurrimia robusta (Roxb.) Kurz.

RHAMNACEAE

Ventilago gamblei nom. nov.

Ventilago lanceolata Gamble, Kew Bull. 1916: 134. 1916; Alston in Trimen Hand-book Fl. Ceyl. Suppl. 49. 1931, non Merr. (1915).

A new name is needed for this species of southern India and Ceylon, as the one selected by Gamble in 1916 had been used by me for a different Philippine species one year earlier.

ELAEOCARPACEAE

Elaeocarpus tectorius (Lour.) Poir. in Lam. Encycl. Suppl. 2: 704. 1812, excl. fruct.; Merr. Trans. Am. Philos. Soc. II. 24(2): 256. 1935.

Craspedum tectorium Lour. Fl. Cochinch. 336. 1790, ed. Willd. 411. 1793.

Dicera craspedum J. F. Gmel. ex DC. Prodr. 1: 520. 1824.

Elaeocarpus robustus sensu Merr. Jour. Arnold Arb. 32: 189. 1951, excl. syn. plur., non Roxb. § Chascanthus.

This is an endemic species of Indo-China erroneously placed as the equivalent of *Elaeocarpus robustus* Roxb., the type of which was from Silhet, India. In the rather extensive synonymy cited by me in 1951 only *Craspedum tectorium* Lour. and *Dicera craspedum* J. F. Gmel. actually belong with the Loureiro *Elaeocarpus* species above cited. Loureiro's genus and species were based on specimens from the vicinity of Hue, Indo-China. *Clemens 3688* (in flower) and 4156 (in fruit) were collected near Tourane, which is about 100 kilometers south of Hue. Clearly most of the Cochinchinese species characterized by Loureiro were observed in the vicinity of Hue, where he lived for many years. Both the Clemens' numbers are in the Paris and the University of California herbaria, and the first is also at Kew and the Arnold Arboretum. In 1951 I very critically compared the Kew specimen with the Loureiro one at the British Museum, and surely a single species is represented. *Clemens 3688* is with mature flowers; the Loureiro specimen has very immature buds.

The Loureiro original description is ample and well prepared. He unfortunately "guessed" at the fruit characters in his generic description of Craspedum, and for this reason Corner illogically refused to recognize Craspedum tectorium Lour, as worthy of consideration. I disagreed with

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him then as I do now, for all one has to do is to exclude the description of the fruit in Loureiro's generic account of *Craspedum*; the specific description was wholly based on a flowering specimen.

Dr. Gagnepain in 1943 (Not. Syst. 11: 1–14) increased the number of Indo-Chinese species of *Elaeocarpus* by describing twelve new ones. He did not indicate the sections in accordance with Schlechter's scheme of classification, but no less than eight of them belong in *Chascanthus* by the indicated number of ovary cells (3) and the number of ovules in each cell (2).

This note is prepared to correct my error of 1951 when I misinterpreted Loureiro's species by reducing it to *Elaeocarpus robustus* Roxb. I add brief descriptive data based on the Loureiro specimen in the British Museum and *Clemens 3688*, 4156 from near the type locality. Dr. Gagnepain left the two Clemens collections in the Paris herbarium without comment under the binomial *Elaeocarpus tectorius* (Lour.) Poir. which I assigned to them when the identifications were made by me and the sets of duplicates were distributed in 1927–28. I can only assume he approved of my identifications. I am indebted to Dr. Tardieu-Blot for checking the specimens.

Leaves nearly or quite glabrous, 7–13 cm. long and 3–5.5 cm. wide; lateral nerves 7 to 9 or 10 pairs; petiole 2–3.5 cm. long; flowers about 1 cm. in diameter, the petals 20–30-laciniate; ovary hairy, 3-celled, cells 2-ovulate. Fruit ellipsoid, sharply apiculate, practically glabrous, the bony endocarp very rugose. A photograph of the Loureiro specimens, a carbon rubbing of a full-grown leaf, and extensive notes are in the Arnold Arboretum herbarium; this was a second and later collection by Loureiro, sent by him as representing his species. The specimen is not the actual type.

DILLENIACEAE

Saurauia costata Reinw. ex de Vriese, Pl. Ind. Bat. Or. 56. 1856.

Saurauia warburgii Koord. Meded. Lands Plant. 19: 354, 644. 1898, Suppl. Fl. Celeb. 2: pl. 80. 1922 (poor), 3: 39. 1922, syn. nov.

Reinwardt's species was based on material collected by him in October 1821 on Mount Sempo, Celebes, there being three sheets of this collection in the Rijksherbarium, Leiden. It is suspected that Koorders did not see these specimens, for otherwise he would scarcely have proposed *S. war-burgii* Koord. as new in 1898. The latter was based on *Koorders* 18954, 19283, from Minahassa Province, northeastern Celebes. The several sheets representing the two supposedly different species are so similar that all might have been taken off the same plant or stand of plants.

De Vriese, in publishing Reinwardt's description, noted that this Celebes form resembled a Philippine collection, Cuming 455, which de described, l.c., as Saurauia exasperata De Vr.; this is, however, Saurauia latibractea Choisy (1854) as I understand that species, one that clearly is not closely allied to S. costata Reinw. Koorders stated that his new species was allied

to the Philippine Saurauia elegans (Choisy) F.-Vill. (S. rugosa Turcz.), and Stapf had noted on one of the Reinwardt sheets that it was "very near S. rugosa Turcz." In the latter species, which occurs in most provinces in Luzon and in Mindoro, the lax, long-peduncled, many-flowered inflorescences are up to 16 cm. long and 10 to 12 cm. wide, while its smaller leaves are, as Koorders noted, rounded, not cordate, at the base. He described the inflorescences of E. warburgii Koord. as only 2.5 cm. long. Although the vegetative characters of the two species are suggestively similar, I do not think that they are closely allied.

Saurauia lanceolata DC. Mém. Soc. Phys. Hist. Nat. Genève 1: 421. 1821, quoad descr., excl. pl. 4; DC. Prodr. 1: 526. 1824; De Vriese, Pl. Ind. Bat. Or. 39, 1856.

This is a very curious case. It is suspected that most authors have interpreted De Candolle's species from his distinctly good plate. His technical description was based wholly on a Javan specimen, Leschenault 643, the type being in the Paris herbarium. An excellent photograph of this type, kindly supplied by Madame Tardieu-Blot, is before me, including even the supplementary sheet with sketches of the flower and dissection notes. As will be seen from the photograph, the Leschenault specimen (no. 643) has only slightly developed inflorescences. This type should be compared critically with that of Saurauia micrantha Blume from Mt. Gede. Although no exact locality in Java is given for S. lanceolata DC., it would have to be from a readily accessible place, such as Mt. Gede.

The strange thing is how De Candolle's plate became associated with the Javan species. Zollinger, Syst. Verzeichn. 148. 1854, noted the great similarity of illustration to the South American S. ruiziana Steud., stating: "S. lanceolata DC. Mem. t. IV tam similis est S. Ruizianae Steud. (Ap[ateria] lanceolata D.C) ut nullomodo distincta videatur quamvis petalis basi coalitis. An de patria error quisdam in herbario Parisii adfuit?" Madame Tardieu-Blot says: "Le type est glabre (photo) et correspond à la description. Au contraire, la figure (Pl. IV) est très differente (velue) et cadre très bien avec S. Ruiziana." De Candolle's specific epithet has priority over any other designating a plant with which this type can be

matched.

GUTTIFERAE

Calophyllum rotundifolium Ridl. Jour. Fed. Malay States Mus. 5: 22. 1914; Fl. Mal. Penin. 1: 188. 1922.

British North Borneo, Mount. Kinabalu, Clemens 30984, 31428, 35038, 40705, 50316. The altitudinal range is indicated on two labels as 4,000 and 5,000 ft. I cannot distinguish this strongly marked species from Ridley's type at Kew. The sessile, broadly cordate, suborbicular to broadly ovate leaves vary in length from 2 to 7 cm., their apices rounded or very broadly rounded occasionally slightly retuse. Malay Peninsula (Selangor). alt. 5000 ft. New to Borneo.

VIOLACEAE

Rinorea lanceolata (Roxb.) O. Kuntze, Rev. Gen. Pl. 1: 42. 1891.

Vareca lanceolata Roxb. Fl. Ind. 2: 446. 1824, ed. 2, 1: 648. 1832.

Celastrus pauciflora Wall. in Roxb. Fl. Ind. 2: 400. 1824.

Pentaloba lanceolata Wall. List no. 4023. 1830, nom. nud.

Pittosporum? serrulatum Jack ex Griff. Calcutta Jour. Nat. Hist. 4: 195. 1843, syn. nov.

Alsodeia lanceolata Oudem. Arch. Néerl. 2: 196. pl. 6. 1867; Hook. f. Fl. Brit. Ind. 1: 188. 1872; King & Gamble, Jour. As. Soc. Bengal 58 (2): 404. 1889 (Mater. Fl. Malay. Penin. 1: 48); Ridl. Fl. Malay Penin. 1: 131. 1922.

For a rather sharply characterized species known only from Penang Island, this has accumulated a considerable synonymy. My attention was called to it through an attempt to place the generally ignored binomials Pittosporum? serrulatum Jack and Celastrus pauciflora Wall., both based on Penang material. Jack sent a copy of his description to Wallich, who realized at once that no Pittosporum was represented, and, as he says he had no specimens from Jack, he apparently surmised from the description that Celastrus might be the proper place for it and so described it as his own species, although stating that the description was from Jack. Griffith, who edited the Calcutta reprint of Jack's plant descriptions in 1843, says that his data were from Jack's MS., yet these are the same as those published under Celastrus pauciflora Wall. It is suspected that Jack did send a specimen to Wallich which the latter failed to associate with Jack's manuscript description. Under Vareca lanceolata Roxb. Flora Ind. 2: 446. 1824, Wallich states: "I have specimens belonging probably to this plant, which were collected at Pinang by W. Jack, who in a Mss. note says: 'I am at a loss what to make of this shrub. I thought it might be a Vareca (according to Roxburgh) but the capsule is one-celled, three-valved, with parietal placentae." There is a specimen of Wallich 4023, type collection of Pentaloba lanceolata Wall. which, as far as the record goes, was not based on Vareca lanceolata Roxb., and two modern collections of the species from Penang in the herbarium of the Arnold Arboretum. As far as the two somewhat generalized descriptions of Jack and of Wallich are concerned, they agree in all respects with the characters of Rinorea lanceolata (Roxb.) O. Kuntze, the type of which was from Penang.

Rinorea semigyrata (Turcz.) J. J. Sm. in Koord. & Val. Meded. Dep. Landbouw 18: 73. 1914 (Bijdr. Boomsoort. Java 13: 73).

Pentaloba semigyrata Turcz. Bull. Soc. Nat. Moscou 27 (2): 342. 1854. Alsodeia disticha Zoll. ex Teysm. & Binn. Cat. Hort. Bogor. 183. 1866, nom., et in Miq. Ann. Mus. Bot. Lugd.-Bat. 4: 216. 1869, nom., syn. nov. Alsodeia semigyrata Turcz. ex Jacks. Ind. Kew. 1: 93. 1893.

Alsodeia paradoxa Blume ex Oudem. Arch. Néerl. 2: 204. pl. 15. 1867, et in Mig. Ann. Mus. Bot. Lugd.-Bat. 3: 71. 1867.

Rinorea paradoxa J. J. Sm. in Koord. & Val. op. cit. 67; Van Ooststr. in Backer Beknopte Fl. Java 4a (1): Fam. 48. 3. 1942.

Turczaninow's specific name is apparently the oldest valid one for this rare, or perhaps even extinct Javan species. His type was Zollinger 2979, and a duplicate of this collection is in the herbarium of the Arnold Arboretum, acquired in 1941 from the Boston Museum of Natural History, having originally been in the private herbarium of John Amory Lowell. The original description is short and unsatisfactory, leading J. J. Smith, who reproduced it in 1914, to think that perhaps some genus other than Rinorea was represented; yet he actually effected the transfer of the specific epithet to Rinorea. Van Ooststroom in 1942 apparently saw only the Blume material at Leiden, there being at least four sheets labeled by Blume as Alsodeia paradoxa; these specimens came from the Salak and Boerangrang Mountains, western Java. The region has been very intensively explored in the past century. He noted that the species had apparently not been collected since Blume's time. I cannot distinguish Zollinger 2979 from these Blume specimens, its label merely indicating that it was collected in Java. It also bears an unpublished Zollinger binomial in Imhofia. This leads me to reduce, without question, the nomen nudum, Alsodeia disticha Zoll., as this specific epithet is the one that appears on our Zollinger specimen sub Imhofia. It is suspected that at first Zollinger thought that he had a representative of a new genus and then found that the generic name originally assigned to his number 2979 was a preoccupied one. Teijsmann and Binnendijk, who first printed the Zollinger binomial, merely indicate the species as being from "Ind. or." Some of the higher numbers of the Zollinger collection distributed under Java labels were actually from Sumatra.

I note that although *Rinorea semigyrata* J. J. Sm. was legitimately published in 1914, it was overlooked by the compilers to the supplements to Index Kewensis. Further I note that the binomial *Alsodeia semigyrata* was not actually published by Turczaninow, Bull. Soc. Nat. Mosc. 36(1): 559. 1863, as currently accepted. All that he stated was that his three species of *Pentaloba* (*P. corylifolia*, *P. fasciculata*, and *P. semigyrata*) represented species of *Alsodeia*, but he made no actual transfers.

LYTHRACEAE

Lagerstroemia speciosa (Linn.) Pers. (L. flos-reginae Retz.)

I have always been impressed by the apparent reluctance of certain taxonomists to accept changes in the accepted names of plants on the basis of the priority rule, no matter what the evidence is, and no matter what botanist upset the use of a generally accepted binomial strictly in accordance with the Code. A case in point is the very common and widely distributed Lagerstroemia speciosa (Linn.) Pers. versus the later L. flosreginae Retz. When Koehne's monograph of the Lythraceae appeared (Pflanzenreich 17 (IV. 216): 1–326. fig. 1–59. 1903) he correctly accepted the Linnaean specific epithet, and as he was known to be a very critical worker, I did not hesitate to accept his conclusions. The species

extends from northern India southward and eastward through Malaysia to New Guinea and northeastern Australia, and is, I suppose, one of the most frequently collected of the arborescent species because it is so common and so conspicuous, when in flower, in most parts of its very wide range. From Koehne's references it is manifest that he had checked the first publication of the name-bringing binomial. I was therefore somewhat surprised to note that Mr. Corner, Gard. Bull. Straits Settl. 10; 272. 1939, rather curtly rejected L. speciosa (Linn.) Pers. and accepted the later L. flos-reginae Retz. He rested his case on King's statement, Jour. As. Soc. Bengal 67(2): 9. 1898, and manifestly did not check the original documents. King's whole argument is merely that the acceptance of the Linnaean specific name of 1771 was inadmissible, as "he describes M [unchausia] speciosa as a shrub [which is true, as Linnaeus does say "arbuscula"; he had a plant grown in a greenhouse in Germany], whereas this plant [L. flos-reginae Retz.] is a large tree; moreover the rest of the description would apply to various other species of Lagerstroemia." The last part of this statement is true, for the Linnaean description of 1771 is very short and very unsatisfactory. Yet the species is by no means always a large tree; I have seen immature plants in full flower on Luzon that were not more than 2 m. high. But what Koehne did not overlook, as did both King and Corner, is that the original description of Munchausia speciosa Linn. was published in Muenchhausen's Der Hausvater 5: 357. pl. 2. 1770. This description is not only an ample one, but it is accompanied by a really excellent plate; and the plant described and illustrated is in all respects L. flos-reginae Retz. = L. speciosa (L.) Pers. Yet Corner would maintain Retzius' specific name even at this late date. The description, according to Muenchhausen's own statement, was prepared by Linnaeus, in spite of the fact that a year later Linnaeus credited it to Muenchhausen. The specimens on which the description and the illustration were based were from a plant cultivated in the Botanical Garden at Goettingen, the source of it being stated as Java, and at the same time the common Javanese name boengoes was listed, the modern boengoer which is widely used in western Java. Muenchhausen said Java and China, -Linnaeus only China.

Turning to the Linnaean herbarium, a set of photographs of all the sheets being available at the Arnold Arboretum, there are three sheets in the *Munchausia* cover, none of them actually named by Linnaeus; but two of these are manifestly this very common *Lagerstroemia*, and for the most part the plate illustrating the species might have been drawn from these; and in Linnaeus' handwriting on one of these is the name *boengoes*.

We who attempt to apply the approved rules of nomenclature in the determination of the oldest valid specific name for this or that species are always subject to criticism on the part of those who apparently abhor changes in names of well-known species. Generally speaking it will probably be admitted that those who make changes try to do the best that they can with the data which are available to them. We all make mistakes, but that is no reason why we should be tacitly condemned merely because

we do, on occasion, correctly interpret a Linnaean type. There is no approved method whereby the oldest specific name can be abandoned in this case.

MYRSINACEAE

Ardisia oligocarpa nom. nov.

Ardisia oligantha Elm. Leafl. Philipp. Bot. 4: 1496. 1912; Merr. Enum. Philipp. Fl. Pl. 4: 260. 1923, non Baker (1885), nec Mez (1902).

The type and only known collection is *Elmer 12310* from Sibuyan, the flowers unknown. The species belongs in the subgenus *Pyrgus* in the alliance with *Ardisia perrottetiana* A. DC. and *A. serrata* Pers., but has much smaller, differently shaped, entire or nearly entire leaves, and short infructescences with very few fruits and apparently with very few flowers.

Ardisia diversifolia Koord. & Val. Meded. Lands Plant. 33: 249. 1900 (Bijdr. 5: 249).

Ardisia oligantha Mez, Pflanzenr. 9 (IV. 246): 134. 1902, syn. nov. Ardisia javanica A. DC. var. oligantha Blume ex Scheff. Comm. Myrsin. Archipel. Ind. 74. 1867.

The Mez binomial was based on a single Reinwardt specimen from Mount Salatta, Java, in the Rijksherbarium, Leiden. It is not accounted for in Backer's recent treatment of the Myrsinaceae of Java, Beknopte Fl. Jav. VIIB Myrsinaceae 1–20. 1948. I do not see how this can be distinguished from the Koorders and Valeton species, of which Mez saw no specimens. He placed the latter next to his new one, stating "ex descriptione sequenti [A. oligantha Mez] peraffinis"; and in his key to the species on page 73 he apparently could discover no characters by which the two could be distinguished, merely inserting the Javan A. diversifolia Koord. & Val. between A. verrucosa Presl, a Philippine species. and A. oligantha Mez of Java, but indicating no separating characters

Ardisia taytayensis nom. nov.

Ardisia pachyphylla Merr. Philipp. Jour. Sci. 12: Bot. 157. 1917, Enum. Philipp. Fl. Pl. 3: 261. 1923, non Dunn (1912).

A species known from Palawan and Balabac, Merrill 9188, 9216, Escritor Bur. Sci. 21613.

Discocalyx papuana (S. Moore) comb. nov.

Embelia papuana S. Moore, Trans. Linn. Soc. Bot. II. 9: 106. 1916.

The type and only known collection is a Boden-Kloss specimen, Wollaston expedition from Camp VIb Mt. Carstensz, New Guinea, alt. about 1200 m. This is clearly a small erect shrub, not scandent as are all representatives of *Embelia*; Moore did not indicate its habit, and there are no notes.

Embelia cotinoides (S. Moore) comb. nov.

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Maesa cotinoides S. Moore, Trans. Linn. Soc. Bot. II. 9: 103. 1916.

The type of this in the herbarium of the British Museum is an excellent specimen collected by C. Boden-Kloss at Camp VIa Mt. Carstensz alt. 940 m. on the Wollaston expedition to New Guinea, 1912–13. It is in all respects an *Embelia* of the subgenus *Euembelia* in the general alliance with *Embelia sarasinorum* Mez of Celebes and the more widely distributed Malayan *E. coriacea* Wall. but is very distinct from both.

EMBELIA? LUCIDA Wall. List no. 2315. 1830, nom. nud., et ex A. DC. in Trans. Linn. Soc. 17: 134. 1834, descr., Prodr. 8: 87. 1844 = Antidesma coriaceum Tul. Ann. Sci. Nat. Bot. III. 15: 204. 1851, non Antidesma lucidum Merr. (1906).

When a species is described as new but placed not only in the wrong genus but in a family remote from the one to which it belongs, it is sometimes worth while to prepare a record when a correct reduction can be made. Although Mez saw the holotype in the De Candolle herbarium, he was unable to place the species, merely indicating that it did not belong in the Myrsinaceae. At my request Mr. Burkill examined Wallich 2315 at Kew, the type collection from Singapore, and reported to me that, although no flowers are left on the specimen (it was apparently pistillate, judging from De Candolle's description), Embelia? lucida Wall. is safely the same as Antidesma coriaceum Tul. Other synonyms are Antidesma fallax, Muell.-Arg. (1865) and A. pachyphyllum Merr. (1916). Wallich's name cannot be used in Antidesma because of the different Antidesma lucidum Merr. (1906). Penang, Malay Peninsula, Singapore, Borneo; planted at Bogor, Java, fide Pax & Hoffmann.

Maesa megaphylla Merr. Philipp. Jour. Sci. 12: Bot. 158, 1917, Enum. Philipp. Fl. Pl. 3: 255, 1923.

Maesa lobuligera Mez, Repert. Sp. Nov. 16: 310. 1920.

Maesa megalobotrys Merr. op. cit. 20: 422. 1922, syn. nov.

Maesa celebica Koord. ex Koord.-Schum. Syst. Verzeich. Herb. Koord. 3: 100. 1914, nom. nud., syn. nov.

The type of Maesa megaphylla Merr. was Wenzel 1510 from Leyte, that of M. lobuligera Mez, Foxworthy Bur. Sci. 727 from Palawan, that of M. megalobotrys Merr., Merrill 9176 from Palawan, and that of M. celebica Koord., Koorders 18174 from Minahassa, northeastern Celebes. Had Koorders published a description of the latter, then his specific name would be the accepted one for this rather strongly marked species. The specimen of Koorders 18174 at the Rijksherbarium, which I have seen, is fragmentary and sterile, consisting of a branchlet and two large glabrous detached leaves, these about 15 to 18 cm. long and 9 to 12 cm. wide. It is suspected that the reason why Koorders published no description is that he had only sterile material. In such a critical genus as Maesa, where

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species are often distinguished by very slight characters, some might hesitate in reducing a binomial to synonymy where only vegetative parts are known, but the agreements in this case are so close, and the flora of northern Celebes is so similar to that of the Philippines, that I do not hesitate to place Koorders' name in synonymy. It is perhaps unreasonable to discuss the reduction of a mere nomen nudum in detail. Actual specimens now available to me are: Leyte, Wenzel 1275, 1510, 1627 (two of these distributed under another binomial invalidated by Maesa platyphylla Elm.); Bohol, Ramos Bur. Sci. 43324; Dinagat, Ramos & Convocar Bur. Sci. 84657; Celebes, Minahassa, Koorders 18174. No specimen of Merrill 9176 is at present available to me. From the description I had surmised that Maesa megalobotrys Merr. was not distinct from M. megaphylla Merr., and Dr. E. H. Walker, after examining an isotype of the former in the U. S. National Herbarium, confirms this reduction of it. It is also recorded from Palawan and from Mindanao.

OLEACEAE

Ligustrum robustum (Roxb.) Blume, Mus. Bot. Lugd.-Bat. 1: 313. 1850; Mansf. Bot. Jahrb. 59: Beibl. 132: 44. 1924, cum syn.

Phillyrea robusta Roxb. Fl. Ind. 1: 101. 1820.

Olea puberula Ridl. Jour. Straits Br. Roy. As. Soc. 59: 128. 1911, Fl. Malay Penin. 2: 318. 1923, syn. nov.

In checking certain types of Olea at Kew in 1950 I noted a duplicate type of Olea puberula Ridl., i.e., Ridley 15223 from Perlis, Malay Peninsula, and although the specimen is a poorly prepared one, manifestly Ligustrum rather than Olea is represented; this might be suspected from Ridley's description of his species as having terminal panicles. The note made at the time is to the effect that it was apparently a form of Ligustrum robustum (Roxb.) Blume with inflorescences narrower than in the typical form. As Roxburgh's species is currently interpreted, it extends from Nepaul, Silhet, Assam, and Bengal to Chittagong, Burma, Siam, Indo-China, and Sumatra, so that this extension of range to the Malay Peninsula is not surprising. For the present I prefer thus to dispose of Ridley's species, rather than by transferring his specific name to Ligustrum; in any case this is the first record of the genus Ligustrum for the Malay Peninsula.

Linociera pachyphylla sp. nov.

Arbor glabra, inflorescentiis parcissime pubescentibus exceptis, ramulis ultimis subpallidis, teretibus, consperse lenticellatis, 3–4 mm. diametro, nodis superioribus plus minusve compressis; foliis crasse coriaceis, rigidis, siccis utrinque brunneis vel castaneis, subconcoloribus vel subtus paullo pallidioribus, supra nitidis, oblongis vel oblongo-ellipticis, 18–27 cm. longis, 7–9 cm. latis, breviter subobtuse acuminatis, basi late acutis, nervis primariis utrinque 10–12, supra impressis, subtus elevatis, perspicuis, circiter ad marginem valde curvatis, fere anastomosantibus, reticulis pri-

mariis laxis, obscuris, secundariis obsoletis; petiolo crasso, 1.5–2 cm. longo; inflorescentiis axillaribus, solitariis, breviter pedunculatis vel e basi ramosis, 6–7 cm. longis, ramis primariis patulis vel adscendentibus; floribus numerosis, breviter pedicellatis, bracteis inferioribus crassissime coriaceis, ovatis, concavis, circiter 3 mm. longis, superioribus brevioribus; petalis fere liberis, loriformibus, obtusis, 5 mm. longis, basi circiter 1.5 mm. latis, sursum vix 1 mm. latis; antheris 1.1 mm. longis.

BORNEO: Sarawak: Native collector 584, notes lost.

This was distributed as representing Linociera callophylla (Blume) Knobl., but it proves to be remote from the species that Blume characterized. It belongs in the group with Linociera pluriflora Knobl., differing in its very rigid, thickly coriaceous leaves and shorter inflorescences. Other species in this assemblage are L. nitens Koord. and L. verruculosa Merr., but here again the vegetative characters alone separate this proposed new species.

Linociera stenura sp. nov.

Arbor glaberrima, ramulis ultimis gracilibus teretibus, 1 mm. diametro; foliis coriaceis, in sicco pallidis, vix vel obscure nitidis, utrinque subconcoloribus, lanceolatis vel oblongo-lanceolatis, basi acutis, 11–15 cm. longis, 2–4 cm. latis, ab infra medium sursum gradatim angustatis, apice longe graciliter caudato-acuminatis, acuminibus 1–2 cm. longis, obtusis; nervis primariis utrinque circiter 12, inter se plerumque 1–1.5 cm. distantibus, patulis, obscuris, 2–3 mm. a margine confiuentibus, reticulis laxissimis, obscuris vel subobsoletis; petiolo 2.5 mm. longo; inflorescentiis axillaribus, solitariis, brevibus paucifloris, circiter 8 mm. longis, glabris; floribus usque ad 9, plerumque 3–5, breviter (1–1.5 mm.) pedicellatis, 4-meris, petalis linearibus, circiter 5 mm. longis, deorsum leviter ampliatis sed basi vix 0.5 mm. latis.

CELEBES: Malili District, G. Kjellberg 2120, August 19, 1929, a tree with white flowers on riverbank at Waraoe, altitude 50 m., Type in the Stockholm herbarium, a fragment in the herbarium of the Arnold Arboretum.

A species strikingly characterized by its distantly and obscurely nerved leaves which are very slenderly caudate-acuminate, gradually narrowed upward from below the middle, the obscure nerves spreading at nearly right angles and anastomosing with the equally inconspicuous and somewhat arched submarginal nerves 2–3 mm. from the leaf margin, the reticulations very lax, obscure or even subobsolete. Its few-flowered, axillary, solitary racemes are less than 1 cm. in length, even including the 5 mm. long very narrow petals.

Linociera ridleyi nom. nov.

Linociera cuspidate Ridl. Jour. Fed. Malay States Mus. 8 (4): 61. 1917, non Knobl. 1895.

The type of Ridley's species is a specimen collected on Korinchi Peak, Sumatra, at an altitude of about 7300 ft. He stated that it is allied to Linociera montana (Blume) DC. of Java.

Linociera sp.

Microtropis? lanceolata Boerl. & Koord. in Koord.-Schum. Syst. Verzeich. Herb. Koord. 2: 33. 1911.

The type of this species is *Koorders 10283* from Sumatra, a fruiting specimen which in 1940, on the basis of an actual examination of the type in the Bogor herbarium, we could not place other than as a species of *Linociera*, perhaps allied to *L. oligantha* Merr.; see Merrill & Freeman, "The Old World species of the celastraceous genus Microtropis Wallich," Proc. Am. Acad. Arts Sci. 73: 307. 1940. It seems as unwise now to propose a new name for this imperfectly known species in *Linociera* as it did to us in 1940. However, to call attention to this misplaced entity, it has been considered desirable to make a record of it in the family and genus to which the species manifestly belongs. *Linociera lanceolata* Knobl. (1933), the name of a Santo Domingo species, invalidates the use of the epithet of Boerlage and Koorders in *Linociera*.

APOCYNACEAE

Micrechites micrantha (Miq.) Hallier f. Jahrb. Hamb. Wissensch. Anstalt. 17: 156. 1899 (1900), in nota; Bakhuizen v. d. Brink in Backer, Beknopte Fl. Jav. 7B: Apoc. 32. 1948, Blumea 6: 389. 1950.

Otopetalum micranthum Miq. Fl. Ind. Bat. 2: 400. 1857, Versl. Meded. Kon. Akad. Wetensch. 6: 191. 1857.

Ecdysanthera schrieckii Van Huerck & Muell.-Arg. Obs. Bot. 191. 1870.

Micrechites schrieckii Rolfe, Jour. Bot. 23: 214. 1885; Vidal, Phan. Cuming. Philipp. 126. 1885; Merr. Enum. Philipp. Fl. Pl. 3: 332. 1923.

Micrechites polyantha sensu King & Gamble, Jour. As. Soc. Bengal 74 (2): 504. 1907 [Mater. Fl. Malay. Penin. 4 (no. 19): 714], non Miquel. Trachelospermum philippinense Elm. Leafl. Philipp. Bot. 2: 488. 1908.

Micrechites furcata Ridl. Jour. Roy. As. Soc. Straits Br. 79: 95. 1918, Fl. Malay Penin. 2: 368. 1923.

This adjustment in the nomenclature of *Micrechites schrieckii* Rolfe, long considered to be a Philippine endemic, is necessary. Hallier f. in 1900, on the basis of a critical examination of its type specimen, determined the status of *Otopetalum micranthum* Miq. Miquel's description of its fruits as "Bacca corticata, semina intra pulpam fibrosum recepta (adhuc valde immatura)," and again in the species description as "baccae globosae ovoideae" is, of course, an impossible one for *Micrechites*, the fruits of which are slender follicles; what he actually mistook for immature fruits were corolla tubes deformed by insects. Boerlage, Handl. Fl. Nederl. Ind. 2: 379–380. 1899, had discussed this case previous to Hallier's extensive consideration of it. The latter actually utilized nearly six pages of print

in his greatly detailed study of the problem, and even then succeeded in burying his new binomial in the text (p. 156) as "Micrechites micrantha m." where all bibliographers overlooked it for nearly half a century (it still is not listed in Index Kewensis); and at the same time its namebringing synonym is equally buried in the text on page 152. I suspect that even Bakhuizen van den Brink might have overlooked this strangely published new binomial but for the fact that Hallier had added a reference on the type sheet to "Kautsch. Lianen p. 156. 1900"; this I noted, in the herbarium, and this it was that led me to Bakhuizen van den Brink's 1948 consideration of the case. I accept the synonymy as given by him, and add several other binomials.

The species, as I now understand it, extends from Siam and the Malay Peninsula (Maingay 1081) to Sumatra, Java, and also occurs more or less throughout the Philippines. There are, however, available for study only comparatively few collections except for the Philippine area, where about twenty are available. Among the previously unlisted ones are McGregor Bur. Sci. 47371 from Tayabas Province, Luzon, Ebalo 940 from Basilan, and Wenzel 3403 from Surigao Province, Mindanao. There are in the Leiden herbarium certain Javan collections named by Blume as representing Tabernaemontana polyantha Blume which actually represent Micrechites micrantha (Miq.) Hall. f., but there are also other specimens which represent Micrechites polyantha (Blume) Miq. as currently understood. I follow Bakhuizen van den Brink in his interpretation of M. micrantha (Miq.) Hall. f.

VERBENACEAE

Clerodendron fortunei Hemsl. Jour. Linn. Soc. Bot. 26: 259. 1890.

Clerodendron simile Merr. Govt. Lab. Publ. 35: 64. 1906, non Pearson (1901), syn. nov.

Clerodendron mindorense Merr. Philipp. Jour. Sci. Bot. 7: 342. 1912, Enum. Philipp. Fl. Pl. 3: 404. 1923, syn. nov.

Hemsley's description of *Clerodendron fortunei* was based on two sheets of a *Fortune* collection merely indicated as coming from China. I had seen the type in 1935 and was then impressed with its close resemblance to certain Philippine forms. In September 1950 I again examined the type and compared it with specimens representing several Philippine species. I am now convinced that the *Fortune* specimens were taken from cultivated plants in China, for nothing like it has appeared in the very large collections made in southeastern and eastern China in the past thirty years. I do not hesitate to reduce the Philippine *C. simile* Merr. = *C. mindorense* Merr. to *C. fortunei* Hemsl. Hemsley described the corollas as 2 in. long; the longest one I observed was 4 cm. in length. Those of *C. mindorense* Merr. are 3 to 4 cm. long (original description 3 cm.). An allied form is *C. klemmei* Elm. from medium and higher altitudes in northern Luzon, but its corollas are 6 cm. in length.

Chinese associations with the Philippines have extended over a period

of about 2000 years. It is well known that they introduced into the Archipelago various economic plants, for a considerable number of these exotics are still known in the Philippines only by their Chinese names. Occasionally they also introduced an ornamental or merely curious species, as exemplified by Vidal's collection of the bignoniaceous Markhamia caudafelina (Hance) Craib in Albay Province, Luzon; see Sprague in Kew Bull. 1919: 310. 1919. The associations between Amoy and Manila were peculiarly close, and it may be that the Fortune collection came from plants cultivated at Amoy. On the other hand it is more than possible that they were taken from plants cultivated in the Fatee Gardens, across the river from Canton, which Fortune visited in 1843 and described the next year, Gard. Chron. 1844: 590. 1844. The Fatee Gardens still exist, being a series of nurseries on Lingnan Island where ornamental plants are propagated and sold. In the Philippines the species occurs at low altitudes, extending from northern Luzon to Mindoro, Semerara, Negros, and Mindanao. Additional collections at Kew are Cuming 1475 from Batangas Province, Luzon, Vidal 3453 from Laguna Province, Luzon, and Loher 4414 from central Luzon. There is a photograph of Hemsley's type in the herbarium of the Arnold Arboretum.

Clerodendron cyrtophyllum Turcz. Bull. Soc. Nat. Moscou 36(1): 222. 1863.

Clerodendron amplius Hance, Ann. Sci. Nat. Bot. V. 5: 233. 1866.

Clerodendron formosanum Maxim. Bull. Acad. Sci. St. Pétersb. 31: 85. 1886, Mél. Biolog. 12: 519. 1886.

Cordia venosa Hemsl. Jour. Linn. Soc. Bot. 26: 143. 1890.

My interest in looking up Hemsley's type in 1950 was inspired by the same motives as was the case with Clerodendron fortunei Hemsl.; that is, that in the Boraginaceae nothing appeared in the very large modern collections from Chekiang that have passed through my hands in the past thirty years that even suggested the species Hemsley characterized. The actual type of Cordia venosa Hemsl. is a fruiting specimen from Ningpo. A casual examination of the type in August 1950 indicated what the difficulty was, for it represents the very common Clerodendron cyrtophyllum Turcz., Hemsley having erred in placing his fruiting specimen in the boraginaceous genus Cordia; as the type specimen was mounted one would conclude from a casual examination that its leaves were alternate; on the contrary they are opposite. Rehder had added to the sheet "cf. Clerodendron," and later, Jour. Arnold Arb. 12: 76, 1931, had actually reduced Hemsley's species to Clerodendron cyrtophyllum Turcz. This very common and characteristic species is now represented in the herbarium of the Arnold Arboretum by approximately a hundred individual collections, twenty-five of which are from Chekiang. Other areas represented are Anhwei, Hunan, Kiangsu, Kwangsi, Kweichow, Fukien, and Kwangtung provinces, Formosa, Hainan, and Indo-China. There is a photograph of Hemsley's type in the herbarium of the Arnold Arboretum.

RUBIACEAE

Canthium tavoyanum (Parker) comb. nov.

Plectronia tavoyana Parker, Kew Bull. 1925: 429. 1925. Burma.

This change is made for the obvious reason that the generic name *Plectronia* Linnaeus has been misapplied by many modern botanists. The Linnaean type is a representative of the oliniaceous genus *Olinia* Thunberg. See Merrill, Philipp. Jour. Sci. 35: 7. 1928.

Dentella serpyllifolia Wall. ms. "in sched. in Herb. Wall. sub 6206G." 1832, nom. nud.; Craib, Fl. Siam Enum. 2: 27. 1932, nom. subnud.; Airy-Shaw, Kew Bull. 1932: 289. 1932, descr.

LUZON: Rizal Province, Bur. Sci. 1398, August 1906, distributed as Dentella repens J. R. & G. Forster.

Curiously Wallich's accepted name does not appear in his lithographed List (generally cited as Catalogue), but Airy-Shaw apparently found it on a subsidiary label in the master set at Kew. The entry in the distributed lithographed List is under *Dentella repens* Forst., 6206"G? Ripa Irawaddi ad Henzada — 1826. (F[1]os distincta)." The species is now known to extend from Assam and northern Bengal to Burma, Siam, Lombok, Java, Mauritius, Luzon, and Guam (Fosberg). Curiously Dentella repens J. R. & G. Forst. has also been found in Guam, an intermediary stop, and at Acapulco, the terminus of the Manila-Acapulco galleon line (1565–1815). Both species are ruderals probably in part distributed by migratory birds, partly by man. This species is otherwise recorded from Polynesia only from the Marquesas Islands.

Ophiorrhiza sarawakensis nom. nov.

Ophiorrhiza reticulata Ridl. Sarawak Mus. Jour. 1 (2): 32. 1912, non Korth. (1851).

A new name is needed for the Bornean species characterized by Ridley in 1912.

Psychotria polytricha Miq. Fl. Ind. Bat. 2: 287. 1857.

Psychotria rufipila Val. Ic. Bogor. 3: 253, pl. 291. 1909, syn. nov. Psychotria trichophlebia Merr. Mitt. Inst. Bot. Hamburg 7: 295. 1937, syn. nov.

I now think but a single species is represented here. Miquel's species was based on Korthals specimens from Sumatra and Borneo; that of Valeton on Bornean specimens, Teysmann 8000 and Jaheri 509; and that of myself on Winkler 1571, from Borneo. I have seen none of the cited specimens representing Valeton's species, but my concept of its limits is gained from his excellent illustration and ample description. Beccari 822, from Sumatra, in fruit, is currently referred to this species. There are

several old sheets at Leiden where the original records were lost or confused, labeled "Sumatra," "Moluccas" (this scratched), and "Java" (this very doubtful). I suspect that these were all from Sumatra or Borneo.

Psychotria sangeana (Miq.) comb. nov.

Chasalia sangeana Miq. Fl. Ind. Bat. Suppl. 546. 1862.

Psychotria rhodocarpa Teijsm. & Binn. Nat. Tijdschr. Nederl. Ind. 27: 30. 1864.

The type of Miquel's species was a *Teysmann* specimen from Sumatra. On the basis of the material in the Rijksherbarium representing two supposedly distinct species in different genera, both sent by Teysmann, I see no tangible differences and, although fruits are absent, I believe *Psychotria* to be its proper generic designation. Apparently at one time Valeton thought that *Uragoga* was represented, and later that the plant might be a small form of *Psychotria expansa* Blume. Miquel's older name is here adopted.

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